

Millennial Perspectives and Priorities

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Abstract: Through prioritizing student voice, this study investigated the perspectives of millennial students in relation to their preferences and priorities for how they desired to experience teaching and learning. While not experts, our assumption was that undergraduate students, because of their relatively long experience as students, would be closely in touch with how they preferred to learn. Employing a mixed method study, randomly selected students ($n = 291$ of a total $N = 2,993$) completed a brief online survey, and we followed with qualitative focus groups and individual interviews in order to confirm the quantitative data and deepen our understanding of the student perspective. Findings pointed toward particular student preferences and priorities for: teacher behaviors such as caring, passion, and enthusiasm, the communication of clear expectations, course alignment between course content taught and tests, a desire for more real-world examples and applications, and active learning opportunities, all of which, in turn, were generally linked by students to their improved attention, intensity of focus, and ability to engage both in the classroom and during homework.

Keywords: teaching, learning, millennial students, classroom environment, enthusiasm, caring, motivation, student voice

Introduction

When it comes to how college curriculum and instruction may be delivered effectively, researchers have typically ignored or marginalized the voice of undergraduate students. Even large meta-analytic efforts (e.g., Kyriakides, Christoforou, Charalambous, 2013) have reached conclusions that exclude student voice. Hence, by utilizing student voice, this study sought to identify not just key preferences, but more importantly the current *priorities* of millennial students in relation to their experiences with teaching and learning.

Globally, universities are investigating the use of teaching performance indicators for performance-based funding and for benchmarking purposes (Marsh et al., 2002; Prosser & Barrie, 2003; Barrie et al., 2005). Because student voice provides an essential perspective, this study presents data from current millennial students aimed at enhancing the current research on course design and instructional approaches that may effectively impact student learning.

During the fall of 2013 and spring of 2014, data from students were collected. Our ultimate intention was to seek data that might lead to, improve, or at least call into question, how faculty go about their teaching so that students might become more motivated and/or improve their learning. Hence, we asked relatively basic questions about what really mattered to students when it came to how they preferred to be taught and how they thought content and different teaching approaches could impact their learning.

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Clearly, many college students are “Academically Adrift” and have been for some time (Arum & Roksa, 2011). Today, student opinions on teaching and learning, while gathered, are not typically valued or considered to the point of making significant changes in curriculum or instruction. One typical exception may be an instructor’s mid-term request for students to offer formative, anonymous feedback to questions such as: “Thus far, what specifically is helping you learn in this course? What specifically might be hindering your learning in this course? What specific suggestion do you have for providing a better learning experience in this course?” Even in this context, schools often suggest, but do not require teachers to work toward improving their teaching practices, and so teachers may lack a motivating reason to pursue improvement or to risk trying new approaches. Furthermore, while administrators may evaluate the “overall” score of teachers, they may only require that a minimum average number is met.

Typically, administrators do not know whether a teacher reads or employs their student evaluation scores for making improvements. Teachers themselves may not care to read, reflect upon student evaluations, or adapt their teaching accordingly. Teaching and learning, however, are typically challenging and intimate practices that deserve more attention, thought, and responsiveness from the perspective of students in our study. Hence, how may teachers improve the overall classroom experience and learning outcomes that may be derived from today’s student preferences and priorities? As such, our research attempted to better know how students perceive the functioning and quality of their teaching-learning experiences.

This study focused on a large state institution located in a small mid-western town with a Fall 2013 on-campus enrollment of approximately 20,000 undergraduate students (88% White), with a six-year graduation rate hovering around 56%. Of the almost 1,100 faculty members, approximately 60% were full-time tenure/tenure-track and 40% were adjuncts, all incentivized in large measure by the overall average score on a student opinion survey (SOS) taken at the end of each semester. It should be noted that the SOS questions are not constructed within a learning paradigm (i.e., the basic questions ask students about how a given instructor is teaching, not about how that teaching relates to actual student learning), and that this type of instrument for teacher evaluation has been largely held in disregard by the preponderance of evaluation research over the last 30 years.

Because an SOS score may be heavily weighted in tenure, promotion, and reappointment decisions, faculty may fear a low SOS score from students in a particular class or set of classes. Consequently, faculty are often reticent to take any perceived risk with their instruction in fear of how their students will rate them or potentially comment negatively on the SOS form. Such fear or reticence often constrains faculty from implementing or even considering new teaching/learning methods. The other limiting factor with SOS scores is that they arrive in the hands of an instructor at least two to three weeks after the conclusion of a course, thus precluding any data-driven instructional adaptation by an instructor during the semester.

Another challenge is that faculty members are generally unaware of what a particular group of students prefer regarding delivery of instruction (at least until after the semester ends). Faculty may have goals and know that *they* want to do, for example, to engage students better in their readings/lectures but they do not actually grasp what students want during a particular semester. However, because faculty are mostly untrained in the art and science of teaching, they typically are not familiar with how to proceed or fulfill their instructional goals, often using, if any method, trial and error or the methods they experienced under their past instructors. In one study, only 8% of the professors reported taking “any account of research on teaching and

learning in preparing their classes" (Bok, 2006, p. 50). Most faculty do not know much about or the importance of evidence-based teaching, nor are they typically rewarded for same, thus leaving them unaware or unmotivated to try new instructional methods.

Assumptions and Research Question

In light of the foregoing problems and teaching-learning concerns, we assumed that if faculty knew more about what is most important to their students *before* planning curriculum and instruction, they could then focus their efforts in ways that deliver content in a more informed, timely, creative, and confident way, which would then enhance faculty efforts to encourage a more robust learning transfer in collaboration with their students. Thus, the goal for this study became the gathering and analysis of current student perceptions regarding their content, course design, and instructional preferences, from which our research question followed: What do students prioritize and thus prefer to experience during a course that helps them to learn?

By exploring what students prefer, faculty may better understand how to direct their teaching efforts, thus reducing inefficient or ineffective directions, methods, or investments of time and energy. Student voice and their preferences matter. Students are the ones who ultimately invest in the education system in which our society also invests and so heavily values. To understand a student, in effect, is to understand a client, and thus it becomes critical that institutions of higher learning carefully consider the preferences and priorities of students. To this end, our research seeks to provide indications as to what students want to experience when they enroll for an undergraduate degree.

Teaching is ultimately difficult because it is meant to evoke substantive strides in student learning outcomes. Sir Ken Robinson (2014) concludes that "Teaching, properly conceived, is not a delivery system," and cautions teachers that:

You're not there just to pass on received information. Great teachers do that, but what great teachers also do is mentor, stimulate, provoke, engage. You see, in the end, education is about learning. If there's no learning going on, there's no education going on. And people can spend an awful lot of time discussing education without ever discussing learning. The whole point of education is to get people to learn. (2013, video)

Accordingly, this research affords faculty a window in which to view those student perspectives about that which is most important to students in relation to their learning.

Literature Review

In addition to the studies above, the main research that informs our study came from several different though related areas of investigation. While education researchers have not delved into nor prioritized student perspectives as to what impacts teaching and their learning, some studies have been done that are subject or discipline specific. Typically, however, these studies do not lead to strategies or factors that impact undergraduate teaching and learning.

Specific evidence related to how teaching impacts student learning appears to be vital. For example, Sanders and Rivers (1996) found that: "The single most dominating factor affecting student academic gain is teacher effect (p. 6)." This is supported by Wenglinsky's (2000) analysis as to how "changing the nature of teaching and learning in the classroom may be

the most direct way to improve student outcomes" (p. 11). Research has typically focused on student ratings of individual classes, notably the ratings of individual teachers and their practices, while other studies have focused on students' perceptions of the learning environment across their collegiate experience, and how their perceptions are related to study methods and subsequent learning outcomes (e.g. Ramdseen & Entwistle, 1981; Crawford et al., 1998; Lizzio et al., 2002).

Students may not be motivated to learn when faculty deliver course content in a low-key, matter-of-fact way, essentially devoid of overt acts of caring. The old axiom in relation to students still rings true: "They don't care how much you know until they know how much you care," and is supported by Dweck (2007), who performed decades of research on achievement and academic success. She poses a related question: "Do teachers have to love all their students?" and concludes that: "No, but they have to care about every single student" (p. 197). She concludes that a little bit of care can go a long way: "When teachers are judging them, students will sabotage the teacher by not trying. But when students understand that school is for them - a way for them to grow their minds - they do not insist on sabotaging themselves," and goes on to state: "It is common for students to turn off to school and adopt an air of indifference, but we make a mistake if we think any student stops caring" (p. 201). This refers to the idea that learners need to be made aware of their potential to learn a subject, and need to believe that their teachers want to guide them along that process. In this way, students appear to value their teachers' intentional, overt, caring guidance.

If caring is a key to students' motivation to learn, Nel Noddings offers the seminal research in this area. Drawing on the work of Martin Buber, she railed against the mere presentation of disciplinary content, and, unlike cognitive developmentalists, emphasized instead the moral necessity to exhibit caring in one's teaching, leading her to ask "what are we like" when engaged in an act of caring (Noddings, 2002).

Noddings (2002) observed that an essential characteristic of caring is receptive attention, whereby two basic steps happen in sequence:

- a. a teacher's 'motive energy' flows toward the student via an act of caring,
- b. a recognition that an act of caring has transpired and a reciprocal response on the part of the student that is hopefully helpful in some way.

Thus, a connection is made between teacher and student(s) where both give and gain from the experience. In order for this connection to work over a longer term, like a semester, the teacher would be "one who fairly regularly establishes caring relations and, when appropriate maintains them over time" (Noddings, 2002, p. 19).

Through specific processes, an ethic of caring may have the potential to positively impact the classroom. Noddings (1998) conceptualized four processual components: modelling, dialogue, confirmation and practice. Modeling, she posited, is where "We do not merely tell them [students] to care and give them texts to read on the subject, we demonstrate our caring in our relations with them" (p. 190). Dialogue and confirmation, because caring can be manifested in many different ways, affords a way to explain, critique, and gain feedback about acts of caring in order to confirm, disconfirm, or modify caring practices and their implications. Finally, if students are to produce a habit or 'mentality' toward acts of caring, they should have ample opportunities to practice and reflect upon their experiences of care and caring. As such, with the

work of Dweck and Noddings in mind, readily apparent caring on the part of faculty may have important links to student motivation and improved learning outcomes.

In addition, motivating or affording opportunities for students to care more about and intensify their efforts in a course may be linked to key teaching strategies. In accord with our observations during presentations of our research to faculty across the United States, the Heath's (2007) similarly cite evidence that while "Managers have to make people care enough to work long and hard on complex tasks" and "activists have to make people care about city council initiatives, . . . teachers have to make students care about literature" (p.168).

Motivating students to learn may transpire in a variety of ways. The Heath's (2006) illustrate that teachers can motivate their learners to care by transforming and conveying content in the form of a story. Via stories, students associate prior knowledge and emotions from their own personal experiences with the emotions that people in the stories may be feeling, enabling them to create "memory hooks" with the content in a lecture, discussion, or lesson. "It's not about pushing people's emotional buttons, like some kind of movie tearjerker," they write, but rather, "the goal of making messages 'emotional' is to make people care" (p.169).

Emotion-based inspiration to take action may also be fostered and sustained with a teacher's passion and enthusiasm. From their synopsis of the research, the Heath brothers (2006) suggest that: "Feelings inspire people to act" (p. 169). Research also distinguishes and indicates that enthusiasm for teaching, rather than enthusiasm for the subject matter, may be more important to student motivation (Kunter, et al, 2008). Brophy (1986), in his review, identified teacher enthusiasm as one of the main keys for promoting student motivation.

Positive energy enthusiastically presented may also be inspiring and motivational for students. Linda Nilson (2010), founding director of Clemson University's Office of Teaching Effectiveness and Innovation concludes in her book, *Teaching at Its Best: A Research-Based Resource for College Instructors*, that: "Enthusiasm is contagious. You're showing some of yours for the subject matter and the opportunity to teach it will motivate your students' interest in learning it and inspire their respect for you as a scholar" (p. 45).

How then might a teacher reveal his or her enthusiasm? Nilson (2010) encourages teachers to:

Deliver [your] presentations with enthusiasm and energy. Strive for vocal variety and constant eye contact. Vary [your] speaking pace, and add dramatic pauses after major points. Gesture and move around the class. Be expressive! To [your] students, be they right or wrong, [your] dynamism signifies [your] passion for the material and for teaching it. As a display of [your] motivation, it motivates them. (p. 55)

Thus, students may become more willing and better able to learn from a teacher who shows enthusiasm. Nilson (2010) also found that teachers should use a variety of motivational strategies to reach different segments of the student population. As students expressed themselves during our focus groups and individual interviews, their excited, intense emotional tones were evident. Students said they were craving a more personal, caring, and enthusiastic demonstration from faculty during a learning experience. Stemming from our assumptions and the literature above, we turn now to the main details for how we conducted this study.

Method

Deciding that a mixed method approach was an effective way to capture data that answered our research question, we implemented both quantitative and qualitative methods to collect and analyze data. In addition to the context above, and in order for the reader to make decisions about generalizing any findings to another context, below are the salient details of our method so that the reader is afforded a more informed opportunity to determine the utility of this study for their own purposes.

The main purpose behind our online survey was to collect data broadly, then to use the focus groups in order to dig deeper into the results of the survey. Thus, the survey questions were designed to offer an array of possible choices for the students to pick from, using terms that they broadly understood. In order to identify terms that were commonly understood by students, we piloted the questions and answer choices with students, eventually ending up with terms that were easier to understand. Still, we assume that some students did not answer a question or make choices that were absolutely clear to them.

In order to create a more student-centered survey, the process for designing this study and collecting data, that addressed teaching behaviors and learning strategies, began in close collaboration with administration and highly-skilled, experienced instructional designers at the university. These designers have, combined, decades of experience in both teaching and working closely with faculty via observations, individual consults, workshops, as well as in-class focus groups with students. Their background and experience doing research helped to inform production of the survey, the piloting process of the survey questions, as well as the focus group question sets. Their assistance afforded degrees of confidence regarding our direction and method as we moved forward with the investigation.

Prior to collecting and analyzing data, and similar to establishing inter-rater reliability, we asked students to explain their understanding of the terms and questions in the survey. We made changes based on feedback from students (during the piloting phase) so that the terms and questions were clearer, with randomly selected students providing agreed upon definitions and examples of the terms in the survey, with only a handful of students who wanted further clarification.

The survey, constructed in SurveyMonkey, included both rank-order and open-ended questions. For example, students were asked to rank their preferences among teaching strategies. The ranking questions included answer options that were strategies carefully put together in collaboration with experienced instructional designers at Central Michigan's Faculty Center for Innovative Teaching. Open-ended questions were asked of students aimed at mining their personal experience in the classroom or online. In the survey, students were mostly asked to rank (top two) what they perceived as most effective among the teaching strategies presented to them. The five specific areas they were asked to rank included methods or strategies for: course design, student engagement strategies, active learning strategies, assessment, and attention/level of focus.

In order to gather qualitative data, we posed two open-ended questions in the survey with the purpose of revealing any patterns as to what it was that students viewed as most important in a formal educational setting, as well as what they believed would specifically help or hinder their learning. After the survey results were collected and analyzed, patterns were identified which were further probed during semi-structured focus groups and interviews with groups of randomly selected students (sophomore level and above). We wanted to know if these students agreed with

the data, including the calculated averages) from our survey. Hence, we were able to delve deeper into more precise reasons as to *why* we got the results we did, gathering detailed stories and concrete examples (in the results section) in the process to further mine the data from the surveys and develop likely implications.

Sample

In order to collect quantitative data, we constructed a sample of experienced on-campus students that were randomly chosen and stratified by grade level (sophomore, junior, and senior) for each of the six colleges within the university (Health Professions, Business, Science and Technology, Humanities and Social Sciences, Communication and Fine Arts, and Education). Specifically, we randomly selected, per college, 10% of the sophomores, 10% of the juniors, and 10% of the seniors; resulting in 2,993 students at the university. The response rate to the online survey was 9.7% ($n = 291$ students). Some of the key demographics of the respondents include:

- 88% Caucasian/White, 12% minority;
- 6% sophomores, 31% juniors, 50% seniors;
- less than 2% graduate students, and
- 11% transfer students.

There was also a relatively even distribution of students from each of the six colleges, with a range from 13.2% to 20.7%.

Results & Discussion

The results were intended to help answer our query about what students prefer and prioritize in relation to their teaching-learning experiences. Both the online survey results (see Table 1 below) and focus groups yielded salient results. For example, when students were asked in survey question one about which “Course Design Strategies” they preferred (keeping in mind that they were afforded multiple choices), almost two-thirds (65.5%) wanted “instructor provided notes, projects, quizzes, and exams,” followed by almost half (49.2%) who indicated that they wanted a syllabus that included a detailed class schedule. What students didn’t appear to prioritize (12.4%) were communications with their instructors outside of class, and they didn’t appear to value a discussion of class policies (4.4%).

Other highlights in the results included:

- When asked about preferred “Active Learning Strategies” in Question 2, almost three of five students (59.2%) responded with the preferences “hands on,” “interactive labs,” or “experiential activities.”
- When asked about their engagement strategies in Question 3, 76.4% of the students preferred that their learning be related to the real world, whereas they indicated little preference for creative (17.6%) or reflective thinking (12%) types of engagement.
- When it came to assessment strategies (Question 4), students rated highly their preference for instructor timeliness (66.4%).

- Question 5 asked about how attention was best obtained and maintained, and constitutes perhaps our most striking result: four out of five students (80.4%) indicated that an instructor's enthusiasm was a major factor for gaining their attention for learning.

Table 1. Results (ranked in descending order by percentage).

Question 1: Top Two Preferred Course Design Strategies?

Instructor provided notes, projects, quizzes, & exams are all related	65.6%
Syllabus includes a detailed course schedule	49.2%
Instructor creates clear expectations of student performance	35.6%
Homework assignments relate to course objectives	32.8%
I have the opportunity to communicate with my instructor outside of class	12.4%
Policies are discussed clearly	4.4%

Question 2: Top Two Preferred Active Learning Strategies?

Hands on, interactive labs, or other experiential activities	59.2%
Class discussion involves Q&A	44.8%
Case studies involving problem-solving exercises	32.4%
Brainstorming, categorizing, & prioritizing activities	28.4%
Partner or group activities	19.2%
Self-assessment activities such as pre and post surveys	10.8%
Learning through completing community service projects	5.2%

Question 3: Top Two Preferred Student Engagement Strategies?

Real-world connections are made	76.4%
Class environment is stimulating	50.0%
Course content is linked to possible career goals	44.0%
Discussions and examinations require creative thinking	17.6%
Opportunities to reflect on my learning	12.0%

Question 4: Top Two Preferred Assessment Strategies?

Timely feedback on quizzes, exams, projects, & homework	66.4%
Projects	31.0%
Labs	23.2%
Presentations (oral and/or with media)	18.8%
Writing down/turning in a note about the most confusing part of class that day	16.8%
Journals (reflection)	16.4%
Writing assignments	16.0%
Service-Learning projects	6.8%
Capstone projects	4.0%

Question 5: Top three things that caused you to pay attention and learn in class?

Enthusiasm from your instructor	80.4%
Short lecture	39.2%
Problem-solving activities	36.4%
Instructor works problems on the whiteboard	32.4%
Challenges to your creativity	29.6%
Small group discussions	26.8%
Large group discussions	25.6%
Powerpoint presentation	25.2%
Long lecture	4.4%

In the last part of the survey, students were provided an open-ended question to answer: "What specific things make it easy for you to learn?" Without further prompting, 42% of the student responded with one or more of the following words:

- "care" or "caring"
- "passion" or "passionate"
- "enthusiasm" or "excitement"
- "energetic" or "fun"

Students explained that such behaviors would help them to better engage in their learning experiences.

Like with all questions, we followed-up during focus groups (three total, with six to ten students each) and individual interviews (eight) to explore these and other factors more in-depth, and these students also confirmed that caring, enthusiasm and similar behaviors were vital in order to motivate them to invest more time and focus to learn course content.

The responses to the survey, combined with remarks captured during focus groups and individual interviews, appear to reveal a particular longing that students have for faculty who genuinely care, who have passion, and who are enthusiastic. In particular, students want to feel cared about, and they want to feel that what they learn is worth caring about. For example, one student (63) stated, “I can handle hard exams and difficult writing assignments. In fact, I enjoy being challenged. But the amount of work I’m willing to do is directly related to how much the professor cares.”

Discussion

A summary of salient patterns indicates that what hinders students from learning, in their opinion, is a lack of four things: appropriate level of challenge, stimulation, passion/enthusiasm, and caring. This finding adds to and supports the research of Dweck (2007) that emphasizes how caring improves student motivation to learn.

We also wanted to understand some of the specific teacher practices and behaviors that students believed to be disruptive to their learning, and thus the question: “What are specific things that make it difficult for you to learn?” One pattern that emerged in the focus groups and individual interviews was reflected in one student’s (8) view of most of his classroom learning environments: “Boring and not usually challenging enough.” Another student (38) said: “I have trouble paying attention to a teacher who talks the entire class period. I will start daydreaming 15-20 minutes in.” Such a dearth of attention is often supported in the literature on the brain and attention span which, for example, found that a typical student’s attention span ranges between 5 and 12 minutes (Richtel, 2010; Vidyarthi, 2011).

When it comes to how teachers may hinder learning, one student (69) wrote about, “lack of engagement in class, unmotivated professors, constant note-taking instead of conversation, and lack of creativity.” Another student (103) was frustrated due to a lack of feedback from students to instructor: “Professors who do not take the time to question their teaching strategy and if it is actually working,” are typically “not getting feedback from students [which] prevents them [professors] from presenting the material in the most effective way.”

While students are not experts in curriculum or instruction, we asked them to consider their experience and then preferences in relation to a few course design practices. In survey question one, their preferred course design strategies related to:

1. Instructor provided notes, projects, quizzes, & exams are all related (65.6%);
2. Syllabus includes a detailed course schedule (49.2%);
3. Instructor creates clear expectations of student performance (35.6%);
4. Homework assignments relate to course objectives (32.8%)

While the implication may be that students are not experiencing these strategies or techniques, they also indicated via their number one preference above and in their comments that the

instructor should design a given course that creates a clear and precise pathway to a good grade, an expectation that is both warranted (yes, course alignment is essential to better learning outcomes) and yet troublesome (shouldn't instructors expect students to take their own notes?).

Assessment is also a part of course design. Two-thirds of the students emphasized that alignment of what is taught with their exams helped their learning to be more effective, and an equal percentage said they would prefer more timely feedback on exams and project work. Almost half said that a clear, detailed schedule in the syllabus contributed to their success in a class. When asked, the reason students appreciated timely feedback on exams and projects was because it allowed them to have closure with the information upon which they were so focused, before being exposed to new content requiring a more focused type of attention.

While not surprising in the light of current research, 60% of students said that hands-on experiential activities get them more engaged and act as a pivotal aid to their learning. In the same vein, 45% say class discussion involving question and answer (Q&A) is what they would prefer for a class activity. Students were emphatic in their preference for quality Q&A, that is, being challenged by their instructors with tough questions followed by hearing other student views on the material being covered. The key ingredients to a quality Q&A appear to be rigor, a real-world connection, and a teacher who strategically mediates and facilitates the flow of conversation.

When asked to rank their top two preferred engagement strategies, 76% of students said they benefitted when real-world connections were made in class. With their second and third preferred option, 50% of students chose how the class environment should be stimulating (that is, they felt more like engaging with given content), and 44% said that they were more likely to feel engaged when the class content related to the real world or their career goals. Of special note, students felt more stimulated and likely to participate in class when it was clear that opportunities to use critical thinking would not be subject to any kind of grading.

Students generally worried about their grades in a given class, so we asked them to rank their top two preferred grading strategies: 53% of students said that three to five small exams helped them to take more away from each lesson; 39% said that several small quizzes contribute more to their learning, priorities that also held true in the focus groups. Students said that the longer the amount of time between the exams, the larger the amount of information they would be required to memorize, which may illustrate that students want to become more intimate with the content they are learning, and would appreciate more learning and less memorization.

The question with the highest consensus was in relation to student focus: "What three things cause you to really pay attention and learn in class?" Four of five students (81%) said that enthusiastic teachers cause them to really pay attention and learn in class. During the interviews, students revealed relatively intense emotions on this topic. When asked what an enthusiastic professor looks like, several students ruled out a need for "edutainment." Instead, they simply wanted the instructor to show some sincere emotion, reasoning that why should they care about what an instructor is teaching if his or her emotion is flat or there's no overt indication of caring. Students said hand gestures, body language, tone of voice, pace, facial expressions and upbeat attitude were ways that instructors could display enthusiasm. Students were also attracted to enthusiasm because they respected people who put greater effort into their work.

In the last open-ended survey question, we wanted to know more precisely what teachers could do to help students learn and get more out of their education, asking: "What are specific things that make it easy for you to learn?" One student (63) explained: "When a professor is enthusiastic and genuine, my ability to do well in the classroom skyrockets. Nothing means more

as a student to have a professor who truly cares." This may indicate that students are receptive to an instructor's energy and are able to notice when a professor is sincerely trying or not. With a slight but significant twist, one student (46) added: "Enthusiastic instructors who really enjoy teaching and really love the subject help me to learn." This reminds us again that students can tell if a professor loves what they teach or not. Students need to feel that the material is important to the instructor, generally ascertained through his or her degree of passion or enthusiasm.

Asking questions and collaboratively working through appropriate challenges were important to students, one (198) saying that what helps is: "Engaging teachers that ask questions through the class so you have to pay attention." In order to gain further elaboration, students in a focus group queried: "Why wouldn't you have to pay attention otherwise?" Their input indicated that often times an instructor will try to fit too much information into one lesson plan, who then ends up talking the entire class period, which then leads to weakened attention and students who let their minds wander. Students wanted to participate in a lesson plan that was more "engaging and challenging, but not too challenging."

When it came to likeability, one student (48) said, "I like when a professor is personable and tries to tailor the class to the specific group of individuals in that class instead of having one way to do things for everyone." In a focus group, when asked what difference it made if a teacher is personable or not, and more precisely what personality has to do with learning, students claimed that all it took was an effort to get to know them personally "before cramming information down their throats." Students viewed instructor personality as a sign of respect, like getting to know their names or favorite songs, and were more likely to reciprocate with greater effort during the semester. Students said they were more willing to work *with* a professor rather than to work *for* a professor.

Conclusions and Implications

Our study brings to surface a relative consensus among a subset of millennial undergraduate students regarding their perceived preferences when it comes to teaching and learning. By the end of our investigation, we came to know more about what appeared to be significant and legitimate student perceptions in relation to classroom teaching and learning. While students are not experts in curriculum, course design, or instruction, the major implication of our study appears to be that students do indeed have marked preferences when it comes to how they are taught, and that modifying curriculum, course design, and instruction in accord with such preferences may lead to either increased student motivation, focus, and/or improved student learning outcomes. Of course, any such linkages would be apropos for further investigation.

Future research into student perspectives is ripe with possibilities. For example, whereas we focused data collection in the classroom, online students may have a very different set of preferences and priorities. Also, faculty historically don't pursue behavioral changes to their teaching, so asking teachers why they don't do this could be of great interest, or conversely, what motivates faculty to undertake changes that respond to student opinions? Another area involves student attention and focus. While we touched on this, what are more effective ways to capture student attention and develop greater focus among millennials and students of the digital age? Additional studies could gather data as to what students specifically identify as caring or as enthusiastic behavior. Finally, while this study generated some focus group data as to *why* students prefer, for example, passion or high energy, more study is needed as to the reasoning behind the effectiveness of certain preferred behaviors or teaching practices.

As far as lessons learned, starting with a larger initial sample would have most likely increased the number of survey respondents. We could have been more intentional about gathering data and reached out to more diverse and/or international student groups in order to augment or enrich the data set. Segmenting the data by ethnicity or by international students may have yielded a broader perspective and different preferences. In reference to methodology, employing a mixed method approach yielded both a breadth and depth to our data. The number of survey questions, seven, seemed to be about the right amount (no students complained about the length of the survey and all respondents completed the survey). We also came to appreciate the eagerness and desire with which students shared their ideas and opinions.

In summary, students appear to want teachers who teach with heart, that is, with passion, enthusiasm, and caring, which may in turn be vital practices for increasing student motivation to learn. Overall, without prompting the students, 42% of the responses from the open-ended survey question included the following words: care, passion or passionate, enthusiasm or excitement, energetic or fun, and interaction or involvement. Students appear to need and want these things in order to better engage in their classes and coursework.

By extending the work of Noddings (1998, 2002) and her ethic of caring, we may also conclude that teaching is never a choice to focus on either curriculum or instruction. Students want a curriculum that is challenging and that makes real-world connections in order for their learning to become more meaningful. Students also want a teacher who does not merely deliver the curriculum with a pro-forma approach. They want a teacher who cares, learns their names, who is personable, passionate, makes course expectations clear, and who challenges their thinking through active learning.

Students today are widely subject to boredom and a litany of distractions meant to keep boredom at bay: online video, video games, TV, texting, tweeting, skyping, and music that's available 24/7. Focusing young adults on challenging course work presents teachers with a major challenge: to keep students mentally engaged and emotionally involved once they are in the classroom or online. When students elaborate, they indicate that teachers who exhibit positive energy is motivational, that body language or facial expressions indicating passion starts to capture their attention and tends to increase their responsiveness. Teachers might do well to reflect from this student perspective and ask: "Would I want to take my class? Am I creating a culture in the classroom that increases motivation and at least potentiates improvements in student learning over the course of an entire semester? Could I make my expectations clearer, provide more real-world connections with more active learning methods, and approach teaching with greater passion, enthusiasm, and caring?"

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References

- Arum, R., & Roksa, J. (2011). *Academically adrift: Limited learning on college campuses*. Chicago, IL: University of Chicago Press.

- Barrie, S., Ginns, P. & Prosser, M. (2005). Early impact and outcomes of an institutionally aligned, student focused learning perspective on teaching quality assurance. *Assessment and Evaluation in Higher Education*, 30(6), 641–656.
- Bok, D. (2006). Our underachieving colleges. Chicago, IL: University of Chicago Press.
- Brophy, J. (1986). Teacher influences on student achievement. *American Psychologist*, 41, 1069–1077.
- Crawford, K., Gordon, S., Nicholas, J. & Prosser, M. (1998). Qualitatively different experiences of learning mathematics at university, *Learning and Instruction*, 4(5), 331–345.
- Dweck, C. S. (2007). *Mindset: The New Psychology of Success*. New York, NY: Ballantine.
- Entwistle, N. J. & Ramsden, P. (1983). *Understanding student learning*. London: Croom Helm.
- Heath, C., & Heath, D. (2007). *Made to stick: Why some ideas survive and others die*. New York, NY: Random House.
- Kunter, M., Tsai, Y., Klusmann, U., Brunner, M., Krauss, S., Baumert, S. (2008). Students' and mathematics teachers' perceptions of teacher enthusiasm and instruction. *Learning and Instruction*, 18(5), 468-482.
- Kyriakides, L., Christoforou, C., & Charalambous, C. Y. (2013). What matters for student learning outcomes: A meta-analysis of studies exploring factors of effective teaching. *Teaching and Teacher Education*, 36, 143-152.
- Lizzio, A., Wilson, K. & Simons, R. (2002). University students' perceptions of the learning environment and academic outcomes: implications for theory and practice, *Studies in Higher Education*, 27(1), 27–51.
- Marsh, H. W., Rowe, K. J. & Martin, A. (2002). Ph.D. students' evaluations of research supervision, *Journal of Higher Education*, 73(3), 313–348.
- Nilson, L. B. (2010). *Teaching at its best: A research-based resource for college instructors* (3rd ed.). Bolton, MA: Anker Publishing.
- Noddings, Nel (1998). *Philosophy of education*. Dimensions of philosophy series. Boulder, CO: Westview Press.
- Noddings, Nel (2002). *Starting at home. Caring and social policy*. Berkeley, CA: University of California Press.
- Prosser, M., & Barrie, S. (2003). Using a student-focused learning perspective to strategically align academic development with institutional quality assurance. *Towards Strategic Staff Development in Higher Education*, 191-202.

Ramsden, P. & Entwistle, N. (1981). Effects of academic departments on students' approaches to studying. *British Journal of Educational Psychology*, 51(3), 368–383.

Richtel, M. (2010, November 21). Growing up digital. Wired for distraction. *The New York Times*. Retrieved from http://www.nytimes.com/2010/11/21/technology/21brain.html?pagewanted=ed=all&_r=0

Robinson, K. (2013, April). *How to escape education's Death Valley* [Video file]. Retrieved from http://www.ted.com/talks/ken_robinson_how_to_escape_education_s_death_valley?language=en

Sanders, W. L., & Rivers, J. C. (1996). Cumulative and residual effects of teachers on future student academic achievement. Knoxville, TN: Tennessee Value-Added Research and Assessment Center.

Vidyarthi, N. (2011, December). *Attention spans have dropped from 12 minutes to 5 minutes: How social media is ruining our minds*. Retrieved from <http://www.adweek.com/socialtimes/attention-spans-have-dropped-from-12-minutes-to-5-seconds-how-social-media-is-ruining-our-minds-infographic/87484>

Wenglinsky, H. (2000). *How teaching matters: Bringing the classroom back into discussions of teacher quality*. Princeton, NJ: Policy Information Center.